

## **A PHOSPHOLIPASE A<sub>2</sub> ENZYME, ANTIBODIES AND INHIBITORS THERETO**

### Abstract of the Disclosure

The disclosed invention relates to a novel rPLA<sub>2</sub> enzyme, its antibody and use and the preparation method. The purified enzyme, derived from RBC cytosol, produces arachidonic acid dependently to calcium ion, has 42kDa of M.W. determined by SDS-PAGE analysis, shows its isoelectric point at the pH ranging 3.9 to about 4.1 in electrophoresis analysis, has maximum activity at the pH ranging 9.5 to 10 and has its specific activity of 5.6 nM/min/mg. The antibody of disclosed invention reacts with the enzyme rPLA<sub>2</sub> only and rPLA<sub>2</sub> is inactivated by EA4 compound, rPLA<sub>2</sub> inhibitor. The disclosed invention shows that the 42 kDa rPLA<sub>2</sub> identified as a novel form of Ca<sup>2+</sup>-dependent PLA<sub>2</sub> plays an important role in hemostasis, thrombosis and/or erythropoiesis through the Ca<sup>2+</sup>-dependent release of AA.

### **PATENT**

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